

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A personal watercraft comprising:

a hull including a bottom hull and a top deck secured over the bottom hull, the hull defining an engine compartment sized to contain an internal combustion engine for powering a jet propulsion unit, the jet propulsion unit including a steerable water discharge nozzle, the top deck having a raised, longitudinally extending seat adapted to accommodate an operator in straddle fashion,

the bottom hull including a generally v-shaped center keel having a keel surface and a centerline,

wherein the bottom hull has a longitudinal portion lying between a front limit and a rear limit in which the keel has a central keel angle that is smaller at the rear limit than at the front limit, and the front and rear limits being defined within the middle third of the length of the bottom hull.

Claim 2 (previously presented): A personal watercraft as in claim 1, in which the keel angle at a location along the centerline is defined as the angle formed between the keel bottom surface at the centerline and two keel bottom surface locations which are disposed transversely away from the centerline.

Claim 3 (previously presented): A personal watercraft as in claim 2, in which the keel lies within the middle third of the personal watercraft length.

Claim 4 (previously presented): A personal watercraft as in claim 1, in which the personal watercraft includes a rear-most extent, in which the keel rear begins within about 3 ½ feet forward of the rear-most extent, and in which the front limit is located at least about 4 ½ feet forward of the keel rear limit.

Claim 5 (previously presented): A personal watercraft as in claim 1, in which the personal watercraft includes a rear-most extent, in which the keel rear begins within about 4 feet forward of the rear-most extent, and in which the front limit is located at least about 3 feet forward of the keel rear limit.

Claim 6 (previously presented): A personal watercraft as in claim 1, in which the personal watercraft includes a rear-most extent, in which the keel rear begins within about 4 feet forward of the rear-most extent, and in which the front limit is located at least about 5 feet forward of the keel rear limit.

Claim 7 (currently amended): A personal watercraft as in claim 1, in which the personal watercraft includes a rear-most extent, in which the keel ~~portion~~ rear begins within about 5 feet forward of the rear-most extent, and in which the front limit is located at least about 2 feet forward of the keel rear limit.

Claim 8 (previously presented): A jet-propelled personal watercraft comprising:
a hull including a bottom hull and a top deck secured over the bottom hull, the hull defining an engine compartment sized to contain an internal combustion engine for powering a jet propulsion unit, the jet propulsion unit including a steerable water discharge nozzle, the top

deck having a raised, longitudinally extending seat adapted to accommodate an operator in straddle fashion, the hull having a water inlet leading to the jet propulsion unit; and

a center keel portion of the hull having a surface, a length, two sides and a plurality of locations along the keel length through which a transverse cross-section can be taken through the keel, the keel portion terminating longitudinally forward of the water inlet, wherein each transverse cross-section has a portion on each keel side surface having a greatest downward slope, wherein there exists in the center keel portion a longitudinal keel section having a length over which the greatest downward slope increases from front to rear over the section length.

Claim 9 (original): A personal watercraft hull as in claim 8, in which the center keel portion is integrally formed with the hull.

Claim 10 (original): A personal watercraft hull as in claim 8, in which the hull has a length, and in which the keel section lies within the middle third of the hull length.

Claim 11 (original): A personal watercraft hull as in claim 8, in which the hull has a length, and in which the keel section lies at least within 15 percent of either side of the middle of the hull length.

Claim 12 (original): A personal watercraft hull as in claim 8, in which the hull has a length, and in which the keel section lies at least within 10 percent of either side of the middle of the hull length.

Claim 13 (original): A personal watercraft as in claim 8, in which the personal watercraft includes a jet pump, in which the keel section begins about 1 foot forward of the jet pump and has a length of at least 2 feet.

Claim 14 (original): A personal watercraft as in claim 8, in which the center keel has a maximum vertical downward slope at a location 3 feet to rearward of the hull front-most extent that is less than the maximum vertical downward slope at a location 4 feet forward the hull rear-most extent.

Claim 15 (original): A personal watercraft as in claim 8, in which the center keel has a maximum vertical downward slope at a location 3 feet to rearward of the hull front-most extent that is less than the maximum vertical downward slope at a location 3 feet forward the hull rear-most extent.

Claim 16 (previously presented): A personal watercraft as in claim 8, further comprising a keel trough having a trough depth on each side of the keel,
wherein there exists a second longitudinal keel section having a length over which the trough depth increases from front to rear over the section length.

Claim 17 (currently amended): A personal watercraft hull comprising:
a center keel portion of the hull having a surface, a length, and a plurality of locations along the keel portion length through which a transverse cross-section can be taken through the hull, the center keel portion being generally v-shaped over the middle third of the length of the hull;

a keel trough having a trough depth on each side of the keel portion;

wherein there exists a longitudinal keel section of the center keel portion having a length over which the trough depth increases from front to rear over the section length.

Claim 18 (previously presented): A personal watercraft hull as in claim 17, wherein there can be defined a keel trough boundary that is defined as a line described by a rigid member having a first end, a second end, and length, that is lain horizontally and transversely to cross the hull keel portion centerline at a first end and to contact the keel portion near the first end, followed by raising the rigid member second end upward while maintaining keel portion contact with the rigid member first end, until the rigid member contacts the hull at a second contact location,

wherein the trough depth is defined as the distance from the trough boundary to the hull surface.

Claim 19 (original): A personal watercraft hull as in claim 17, wherein the trough boundary has a length, in which the trough depth is a normal depth defined as the largest normal distance over the trough boundary length from the trough boundary to the hull surface.

Claim 20 (original): A personal watercraft hull as in claim 17, in which the trough depth is a vertical depth, defined as the vertical distance from a trough boundary mid-point to the hull surface.

Claim 21 (previously presented): A personal watercraft hull as in claim 17, in which the hull has a length, and in which the keel section lies within the middle third of the hull length.

Claim 22 (original): A personal watercraft hull as in claim 17, in which the hull includes a jet pump, in which the center keel portion begins about 1 ½ feet forward of the jet pump and has a length of at least three feet.

Claim 23 (original): A personal watercraft hull as in claim 17, in which the hull includes a jet pump, in which the center keel portion begins within about 2 feet forward of the jet pump and has a length of at least three feet.

Claim 24 (previously presented): A personal watercraft hull as in claim 17, in which the hull has a front-most extent and a rear-most extent, in which the center keel portion has a maximum vertical downward slope 3 feet rearward of the hull front-most extent that is less than the maximum vertical downward slope 4 feet forward the hull rear-most extent.

Claim 25 (previously presented): A personal watercraft hull as in claim 17, in which the keel portion has a side angle from vertical that decreases to form a more acute and more vertical angle from front to rear over the section length.

Claim 26 (currently amended): A personal watercraft hull comprising:

a center keel portion of the hull having a surface, a length, and a plurality of locations along the keel portion length through which a transverse cross-section can be taken through the hull, the center keel portion being generally v-shaped along its entire length;

a keel trough having a trough depth on each side of the keel;

wherein there exists a longitudinal keel section of the center keel portion having a length over which the trough depth increases from front to rear over the section length.

Claim 27 (original): A personal watercraft hull as in claim 26, in which the keel section length is at least about 2 feet long.

Claim 28 (original): A personal watercraft hull as in claim 26, in which the keel section length is at least about 1 foot long.

Claim 29 (original): A personal watercraft hull as in claim 26, in which the keel section length is at least about 3 feet long.

Claim 30 (canceled).

Claim 31 (currently amended): A personal watercraft hull including a rear tunnel, the hull comprising:

a center keel portion being generally v-shaped, wherein there exists a longitudinal keel section of the center keel portion having concave areas located in either side of the keel portion, wherein the keel section has a length being located within the middle third of the length of the hull over which the concavities get deeper toward the rear.

Claim 32 (original): A personal watercraft hull as in claim 31, in which the keel section length is at least about 2 feet long.

Claim 33 (original): A personal watercraft hull as in claim 31, in which the keel section length is at least about 1 foot long.

Claim 34 (original): A personal watercraft hull as in claim 31, in which the keel has a side angle from vertical and the side angle gets smaller over the length of the section.

Claim 35 (new): A personal watercraft hull as in claim 8, in which the center keel portion is generally v-shaped.